



ATTACHMENT A REMARKS

Considering the matters raised in the Office Action in the same order as raised, claims 1-2, 7-8, 11-13, 15-17, 19-25, and 27 have been rejected under 35 U.S.C. § 102(e) as being anticipated by U. S. Patent No. 6,597,794 to Cole et al. ("Cole") while claims 3-6, 10, 14 and 18 have been rejected under 35 USC 103(a) as being unpatentable over Cole "in view of Homer et al" ("Homer) and claims 9 and 20 have been rejected under 35 USC 103(a) based on Cole "in view of Liu." These rejections are respectfully traversed although, as discussed below, independent claim 15 has been amended to include the subject matter of claim 26 in order to more clearly define over the Cole reference.

Cole discloses "a portable electronic device having an external speaker chamber" and the patent basically concerns providing such an additional, external chamber for a speaker disposed within a portable computer. This is accomplished by providing an acoustic insulator (232) that makes contact with the surface on which the computer rests and that is disposed around, i.e., encircles, an aperture (230) in communication with the back chamber (316) of the speaker (see Figure 3). Such an arrangement is designed to increase sound quality and volume without increasing the size of the case (col. 1, lines 54-58).

In the particular embodiment to which the Examiner makes reference, the Cole patent provides "[a] case 602 [with a] port tube 640 [which] is formed in acoustic insulator 632 such that acoustic insulator 632 does not completely encircle first aperture 630, thus creating ported external chamber 634" (col. 4, lines 34-39). Further, Cole states that the port 640 "provides an acoustic mass for sound from the back portion 554 (see FIG. 5) of the speaker 650 (not shown)" and that "[t]he combination of the air mass or port tube 640 and the compliance of back chamber 558 and external chamber 634 is tuned with speaker 650 to provide an optimum speaker system"

(col. 4, lines 46-49). Thus, in this embodiment, as in the embodiment of Figure 3, aperture 630 is sealed from the front chamber of the speaker and from the aperture 618, as is evident from Figure 5. Moreover, apertures (speaker grill) 618, similarly to the apertures of speaker grill 418 of Figure 5 are sealed by foam seal 580 from the rest of the system.

It is clear from the discussion above that the purpose of the sealed enclosure in Cole is to improve the low frequency sound, (see, e.g., col. 3, lines 43-44), and it is respectfully submitted that no provision is made for any heat generated by the system to escape through the rear aperture (230 or 630). Further, if the heat did escape, the heat would be pushed underneath the portable electronic device and trapped by the acoustic insulator 232 in the embodiment of Figures 2 and 3. Further, although the insulator 632 of Figure 6 does not fully encircle aperture 630 in this embodiment, the aperture 630 is sealed from the front chamber of the speaker and from apertures 618.

In summary, Cole teaches a substantially sealed chamber outside the main chassis of the device which is supposed to create better sound, and, in the preferred embodiment, is specifically designed to keep air *in*. Moreover, the aperture 630, like the speaker grill 618, is completely isolated from and sealed off from the heat generating elements of the chassis 612. In this regard, the Examiner has made reference to “openings 634 in chassis 602.” Because element 634 is an external chamber, it is assumed that the Examiner intended to refer to the single aperture 630 but whatever element is intended, it is respectfully submitted that the “openings” in question do not “allow heat generated by the system to escape” as contended. Moreover, it is respectfully submitted that element 640, which is simply the outlet or port (“port tube”) formed by elements 632 of the chamber 634 defined outside of the chassis 603, is not a “heat generating device” much less “a heat generating disposed within the chassis 602” (emphasis added).

Turning to the claims, and considering claim 1 first, it is respectfully submitted that Cole does not disclose “openings in the chassis from which sound from the speaker can emanate, wherein the openings allow heat generated by the system to escape.” As noted above, the Cole device preferably traps air within an acoustic insulator and, even in the embodiment wherein the acoustic insulator 632 includes an opening, the aperture 630 is sealed to the back chamber and is not in communication with the rest of the internal circuitry of the device, including, specifically, any heat generating element. Thus, it is respectfully submitted that claim 1 and claims 2-9 dependent thereon, are allowable for at least these reasons.

Turning to independent claim 11, this claim is allowable for at least the reasons discussed above. Further, claim 11 also specifically recites a heat generating device and “a second opening in the chassis positioned to facilitate airflow between the second opening along a path past heat generated by the heat generating device ... to the first opening to remove heat from the computer chassis.” Again, these features are clearly not taught by Cole.

Regarding claim 19, it is respectfully submitted that it is evident from the discussion above that Cole does not disclose providing a speaker grill on a surface of a portable computer within an airflow exhaust path nor venting heated air in the airflow exhaust path out through the speaker grill.

With respect to claim 15, it is agreed that Cole shows, in Figure 5, a speaker grill 418 spaced from a speaker 550. To more clearly distinguish over the Cole reference, claim 15 has been amended to include the subject matter of claim 16, and now recites that the internal speaker is located in the chassis such that “heated air from heat generating components in the portable computer can flow out of the surface-mounted speaker grill.” It will be appreciated that sealed chamber 556 provided between the speaker 550 and speaker grill 418 in Cole clearly precludes

such flow of heated air and thus amended claim 15 defines over the Cole reference for at least this reason.

With respect to the Homer and Liu patents, these patents clearly do not make up the basic deficiencies of Cole as a reference against the independent claims, and are not contended to do so. Thus, no fair combination of these references with Cole could result in the present invention as claimed in claims 1, 11, 15 and 19.

Although it is respectfully submitted that a number of the dependent claims set forth separately patentable features, these claims are patentable for at least the reasons set forth above in support of the patentability of the claims parent thereto.

Allowance of the application in its present form is respectfully solicited.

END REMARKS